

Claims

1. Device for continuous manufacture of drip irrigation tubes,
comprising an extruding device (1) for producing a tube body (2), a calibrating
device (3), and a cooling device (19) for the tube body (2), a feed apparatus (5)
5 for feeding dosing elements (6) into the tube body (2) along a guideway (4), and
means for connecting the dosing elements (6) to the inner walling of the tube
body (2), comprising a pressing element (17) which is formed by the end area
of the guideway (4) and which protrudes into the extruded tube body (2), and a
pressing roller (18) which is able to be pressed against the tube body (2) from
10 the exterior in the region of the pressing element (17), the calibrating device (3)
being formed by a tubular body (22) whose feed region (23) narrows to the
desired diameter of the tube body (2) and whose longitudinally elongated body
area (24) protrudes into the cooling device (19), and is provided with a recess
(27) into which the pressing member (18) protrudes so that the pressing and
15 connecting process of the dosing elements (9) with respect to the inner walling
of the tube body (22) ensues inside the calibrating device (3), characterized in
that the pressing roller (18) has an indentation (20), which corresponds to the
outer contour of the tube body (2) in the region of the calibrating device (3), and
in that at least at the bottom of the indentation (20) of the pressing roller (18) a
20 marking structure (21) is applied running over the entire circumference, which
marking structure is transferable to the surface of the tube body (2) in the
region of the respective dosing element (6), and serves location of the position
of the respective dosing element (6) for putting in the outlet aperture.

2. Device according to claim 1, characterized in that the recess (27)
25 in the longitudinally elongated body area (24) of the tubular body (22) has the
form of a slot which extends from the end (29) of the longitudinally elongated
body area (24), protruding into the cooling device (19), to the walling (26)
closing off the cooling device (19), through which the longitudinally elongated
body area (24) is led into the cooling device (19).

3. Device according to claim 1 or 2, characterized in that the pressing pressure of the pressing roller (18) against the tube body (2) is adjustable.

4. Device according to one of the claims 1 to 3, characterized in that
5 the feed apparatus (4, 5) comprises a separating device (7), into which the next of the continuously fed dosing elements (6) is able to be captured in each case, ejected in a way guided onto the guideway (4), and inserted into the tube body (2) by means of an airstream along the guideway (4).

5. Device according to claim 4, characterized in that the separating
10 device (7) is made up of two drivable rollers (8, 9), disposed opposite one another, and in that in each case one dosing element (6') of the continuously fed dosing elements (6) is able to be captured by the two rollers (8, 9), brought into a waiting position, and ejected therefrom onto the guideway (4).

6. Device according to claim 5, characterized in that installed in the
15 guideway (4) is a sensor (13), with which the reaching of the waiting position of the respective dosing element (6') is detectable.

7. Device according to one of the claims 4 to 6, characterized in that
the airstream is producible with air jets (14), which are formed by supply lines (15) that come out into the guideway (4), and in that the supply lines (15) are
20 disposed such that the airstream coming out in each case hits the dosing element (6), to be advanced, at an angle of about 25°.